



Observ. XXXIX. Of the Eyes and Head of a Grey drone-Fly,  
and of several other creatures.

I took a large grey Drone-Fly, that had a large head, but a small and slender body in proportion to it, and cutting off its head, I fix'd it, with the forepart or face upwards upon my Object Plate (this I made choice of rather than the head of a great blue Fly, because my enquiry being now about the eyes, I found this Fly to have, first the biggest clusters of eyes in proportion to his head, of any small kind of Fly that I have yet seen, it being somewhat inclining towards the make of the large Dragon-Flies. Next, because there is a greater variety in the knobs or balls of each cluster, then is of any small Fly) Then examining it according to my usual manner, by varying the degrees of light, and altering its position to each kinde of light, I drew that representation of it which is delineated in the 24. Scheme, and found these things to be as plain and evident, as notable and pleasant.

First, that the greatest part of the face, nay, of the head, was nothing else but two large and protuberant bunches, or prominent parts, A B C D E A, the surface of each of which was all cover'd over, or shap'd into a multitude of small Hemispheres, plac'd in a triangular order, that being the closest and most compacted, and in that order, rang'd over the whole surface of the eye in very lovely rows, between each of which, as is necessary, were left long and regular trenches, the bottoms of every of which, were perfectly intire, and not at all perforated or drill'd through, which I most certainly was assured of, by the regularly reflected Image of certain Objects which I mov'd to and fro between the head and the light. And by examining the Cornea or outward skin, after I had stript it off from the several substances that lay within it, and by looking both upon the inside and against the light.

Next, that of those multitudes of Hemispheres, there were observable two degrees of bigness, the half of them that were lowermost, and look'd toward the ground or their own leggs, namely, C D E, C D E being a pretty deal smaller then the other, namely, A B C E, A B C E, that look'd upward, and side-ways, or foreright, and backward, which variety I have not found in any other small Fly.

Thirdly, that every one of these Hemispheres, as they seem'd to be pretty neer the true shape of a Hemisphere, so was the surface exceeding smooth and regular, reflecting as exact, regular, and perfect an Image of any Object from the surface of them, as a small Ball of Quick-silver of that bigness would do, but nothing neer so vivid, the reflection from these being very languid, much like the reflection from the outside of Water, Glais, Crystal, &c. In so much that in each of these Hemispheres, I have been able to discover a Land-scape of those things which lay before my window,